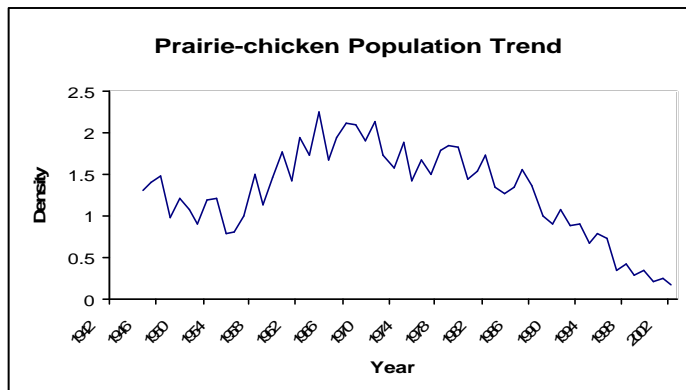


2002 POPULATION STATUS REPORT PRAIRIE CHICKENS

Larry Mechlin
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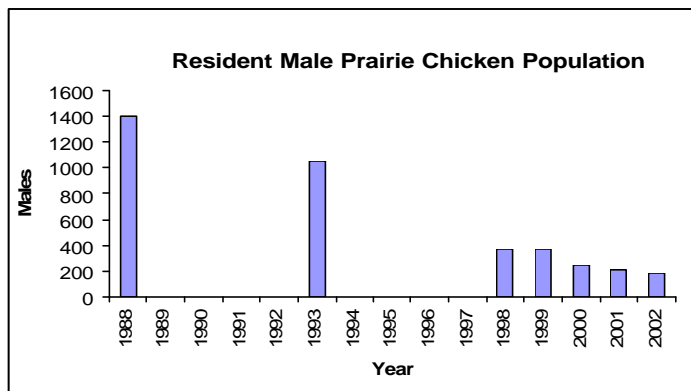
RESIDENT POPULATION



Survey Results:

Prairie chicken densities on 16 routes chosen to represent Missouri's prairie chicken population are indicated on the graph to the left. Booming grounds on routes are located and all birds counted. This graph includes males and females because sexes were not

always distinguished in the early years of the survey. Males maintain territories on the booming ground and are present daily. Female numbers on the grounds can vary widely from one day to the next. Therefore small changes between years on the graph can be caused by the presence of females during the day surveys occurred. The important message is the general trend over the long haul, not small changes indicated from one year to the next. Over the last 20 years that trend has been very disappointing. A



Range wide survey that attempts to census the entire male population on booming grounds has also been conducted on a 5 year interval since 1988. The drastic reduction in the size of the range however, has allowed us since 1996 to attempt this complete census on an annual basis. Both graphs indicate a strong and steady decline in our

resident prairie chicken population with no indication the population can rebound from years of poor production or survival. Bad recruitment years are a fact of life with upland bird populations, but not having the habitat base and producers within the population to respond during good years leaves populations vulnerable to stochastic events. Other problems such as lack of diversity can make populations less fit for survival. Eventually a point is reached where recovery becomes very difficult. Comparisons of DNA from our population to large populations in the Flint Hills of Kansas show Missouri birds to be no less genetically fit. Looking elsewhere for answers, Missouri's birds were tested for exposure to Reticuloendotheliosis viruses in 1999, but none were detected. In all

likelihood we are faced with habitat deficiencies and the very difficult task of restoring the grassland landscaped on a grand scale before recovery is possible. These problems aren't unique to Missouri or the Greater Prairie Chicken. The Attwater's Prairie Chicken, the Lesser Prairie Chicken and the Sage Grouse are all subjects of great concern. Habitat fragmentation and loss are the focus of recovery efforts for each of these grassland grouse species. As a group the suite of grassland species is in jeopardy across the country. We have to focus our efforts where we can make the most difference; where our strongest subpopulations exist with the greatest potential for improvement.

Within Missouri the activities of the Grassland Coalition are bringing new hope to this strategy. Nine focus areas have been identified each with a diverse management team that developed working plans to improve habitat and awareness of the birds plight within that focus area. Activities and progress within each of the nine focus areas was reported in the spring MDC Newsletter authored by Sharron Gough. Additional updates will be reported in the annual update of the Endangered Species Recovery Report.

Population data for each of the nine focus areas:

